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ABSTRACT

Data from 1961, 1971, and 1973 surveys of households and community "knowledgeables" focused on the subjective assessments of the quality of life (QOL) of residents of Harlan, Perry, Whitley, and Wolfe counties in Eastern Kentucky, and assessed policy implications. Overall, residents assessed their counties favorably. They rated wages and income, public utilities, and opportunities for post-high school education as most improved aspects of life, and rated schools and churches highly. The situation was perceived as improved for blacks and the poor but not for the old or young. There was growing satisfaction with personal and family life, especially among the younger, better educated, and more affluent town residents. Despite this optimism, there was concern about real income, physical environment, local government, law enforcement, and recreational opportunities. Future hopes and fears centered around economic conditions and health, especially for children. In remarkable agreement with the country as a whole residents saw the QOL of the U.S. increasingly favorably. Their perceptions of the QOL were not very different from the objective QOL and highlighted certain important issues. Buying power, medical care, general administration of welfare programs, and regulation of strip mining must be improved to maintain the subjective QOL of Appalachian Kentucky. (SB)

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Eastern Kentuckians View Their Quality of Life: Implications for Development

C. Milton Coughenour
and
A. Lee Coleman

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Department of Sociology
College of Agriculture
Agricultural Experiment Station
University of Kentucky
Lexington, Kentucky

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EASTERN KENTUCKIANS VIEW THEIR QUALITY OF LIFE: IMPLICATIONS FOR DEVELOPMENT

*C. Milton Coughenour and A. Lee Coleman**

The Meaning and Measurement of Quality of Life

The term "quality of life" has been much used recently by journalists and the public to refer to the deterioration of the physical environment and related social conditions. Social scientists use it to refer to the evaluation of all the environmental and socioeconomic conditions of a given time and/or place in terms of their effect on human well-being. During the past decade attempts to measure these conditions and the resultant quality of life as a guide to social policy have been increasing.[1] This report presents data from 1961, 1971 and 1973 surveys in four counties of Appalachian Kentucky and assesses some of its policy implications.

Much recent social science research on the quality of life (QOL) has been directed toward identifying indicators that can be used in different times and places to measure the well-being of people, evaluate trends as "better" or "worse," assess the effectiveness of programs, and help set policy priorities. These indicators have been of two types—so-called "objective" measures selected and refined from the Census and other repositories of regularly collected statistical data; and so-called "subjective" indicators obtained through polls and surveys asking people about their quality of life as they subjectively experience it and/or perceive it for their community or areas. The present study uses both types of indicators but is focused mainly on the subjective assessments.

The publication in 1976 of *The Quality of American Life* by Campbell, Converse, and Rodgers[2] was perhaps the most significant milestone in the development and use of subjective indicators. The culmination of 20 years of research at the University of Michigan's Institute for Social Research and of parallel work in other centers and by governmental commissions, this book deals with important conceptual problems and provides national norms useful in this report and in future studies. Among the foundations on which this book rests, the work of Hadley Cantril[3] is particularly important. He focused on the hopes, fears, aspirations, and satisfactions of people as indicators of well-being and developed the "self-anchored striving scale" as a measuring instrument.

Although the approaches, techniques, and measures of the present study vary in part from those of Campbell *et al.*, the research is consistent with their conceptual framework, diagrammed in adapted form in Figure 1. Overall life satisfaction is seen as a function of the degree of satisfaction with the various domains of life—work, family, the locality, services, and the like. Degree of satisfaction, in turn, derives from objective conditions as the person perceives and evaluates them. Differences in residence, race, sex, age, marital status, education and wealth are associated with differential access to and perception of institutions and services. The standard against which a person evaluates things may be his own past condition, the conditions of other individuals or groups with whom he compares himself, or the conditions of people in the wider society as he perceives them. Finally, a person's QOL assessment may vary according to whether the question is framed in terms of his personal/family well-being or that of his community or area.

The Kentucky Study

The present study of quality of life in Appalachian Kentucky is a part of regional research

*The authors are Professors of Sociology, Department of Sociology.

[1]See bibliography at the end of this report.

[2]Angus Campbell, Phillip Converse and David L. Rodgers, *The Quality of American Life.* New York: Russell Sage Foundation, 1976.

[3]Hadley Cantril, *The Pattern of Human Concerns.* New Brunswick, New Jersey: Rutgers University Press, 1965.

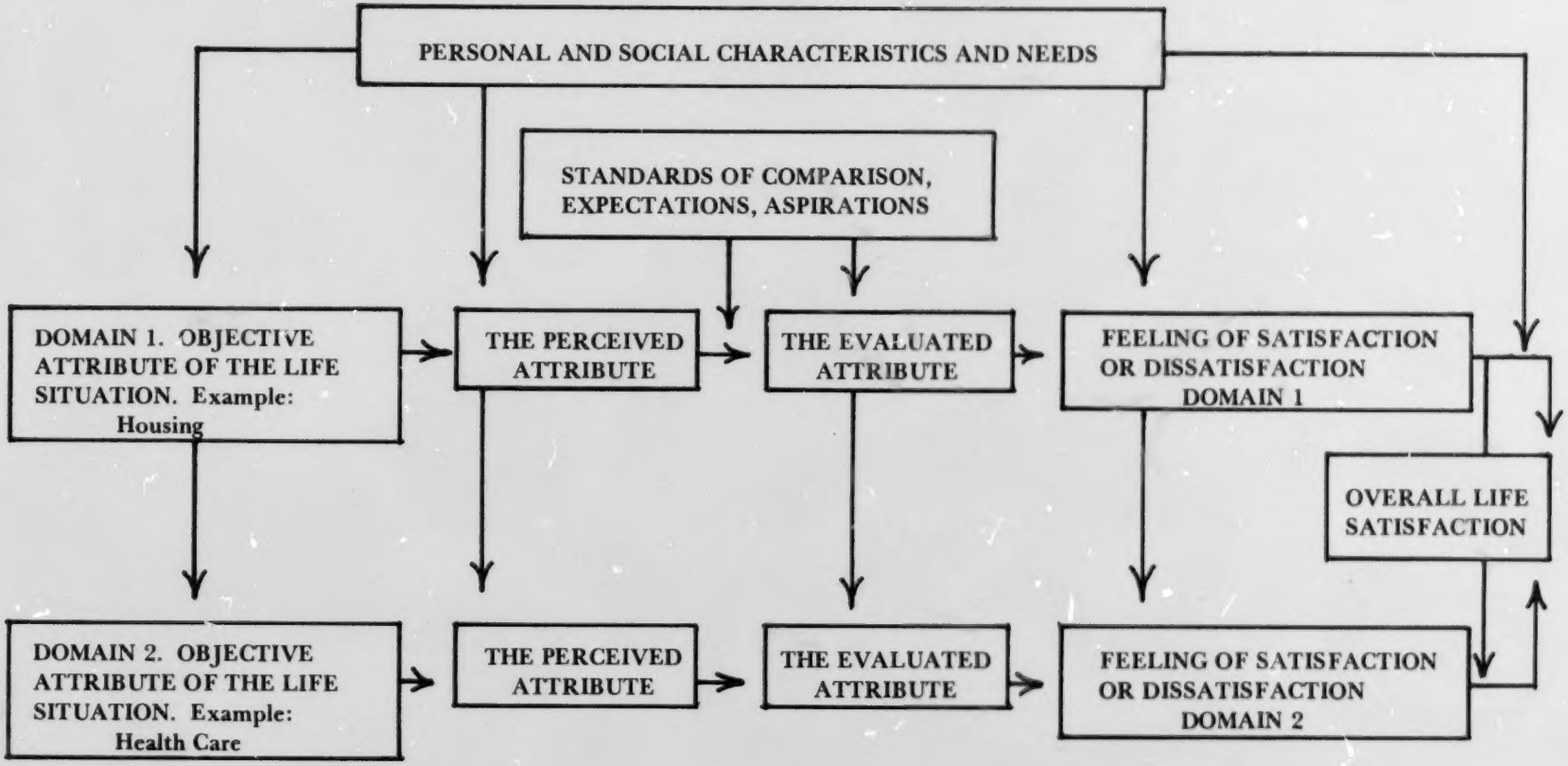
PERSONAL AND SOCIAL CHARACTERISTICS AND NEEDS
STANDARDS OF COMPARISON, EXPECTATIONS, ASPIRATIONS
DOMAIN 1. OBJECTIVE ATTRIBUTE OF THE LIFE SITUATION. Example: Housing
THE PERCEIVED ATTRIBUTE
THE EVALUATED ATTRIBUTE
FEELING OF SATISFACTION OR DISSATISFACTION DOMAIN 1
OVERALL LIFE SATISFACTION
DOMAIN 2. OBJECTIVE ATTRIBUTE OF THE LIFE SITUATION. Example: Health Care
THE PERCEIVED ATTRIBUTE
THE EVALUATED ATTRIBUTE
FEELING OF SATISFACTION OR DISSATISFACTION DOMAIN 2
DOMAIN 3. ETC.

FIGURE 1. MODEL OF RELATIONSHIPS BETWEEN LIFE SITUATION CONDITIONS, PERSONAL FACTORS AND SATISFACTION (Adapted from Figure 1-2, Campbell, Converse and Rodgers, The Quality of American Life, p. 16).

projects carried on since the late 1950s by sociologists in the Agricultural Experiment Stations of eight Southern states, including Kentucky.[4] The initial study in 1961 was designed to explore "the adjustment potentials" of families living in low-income rural areas. Harlan, Perry, Whitley, and Wolfe counties were selected as part of the regional sample of low-income areas, and within each county small sample segments and individual households were randomly selected. The four counties and the sample households are not, as such, a sample of Eastern Kentucky but can be taken as reasonably representative of it.

In the 1961 survey, household heads and homemakers were asked about their satisfaction with their income and residence and their attitudes about the nature of society. These questions were repeated in a 1973 survey in the same sample areas, along with a long series of questions more directly probing quality of life perceptions. These included whether the household heads and homemakers felt their own family situation was better or worse than a decade earlier, whether they saw overall life in their county and 18 specific aspects of life as improved, worse, or the same over the decade, and how they evaluated local QOL trends for the poor, blacks, the aged and youth. Then they were asked how good they thought the current situation was in each of these institutional areas and for each of the groups. The Cantril "self-anchored striving scale" was used to get the respondent's statement of the best and worst possible future (the "anchors") for his family, and where he or she felt the family was or would be located along a 10-point scale between the best and the worst at present, five years previous, and five years hence.

The 1961 survey involved a representative sample of 266 open-country households, while the 1973 sample included 464 households in both the towns and the open-country of the four counties. Also, in 1971, about 25 officials and "knowledgeables" were interviewed in each county (total n = 111), using most of the questions asked in the 1973 household survey.

[4]S-44, "Factors in the Adjustment of Families and Individuals in Low-Income Areas of the South" and S-79, "Rural Development and the Quality of Life in the Rural South."

THE PEOPLE AND FAMILIES IN THE FOUR MOUNTAIN COUNTIES DURING THE SIXTIES AND EARLY SEVENTIES

The flooding streams of people leaving Appalachian Kentucky during the Fifties receded sharply during the Sixties, but substantial outmigration continued until the early 1970s. However, these overall trends cloak wide differences in the patterns of population change for individual counties. Harlan and Perry counties, which depend heavily on coal mining, lost a fourth or more of their populations in each of the two decades. Wolfe county, which was mainly agricultural until recently, declined at about half this rate in both decades, while Whitley county, which had declined by a fifth during the 1950-60 period, attracted considerable industry in the Sixties and declined by only 6 percent in that decade. The overall decline in these four counties during each decade, however, was greater than for Eastern Kentucky as a whole.[5]

By 1970, there were fewer households and the average of 3.4 persons per household was considerably lower than that of a decade earlier. The loss of people is reflected, too, in a marked rise in the average age of people living in the four counties,[6] and a relatively high ratio of those above and below working ages to those in the working ages.[7] On these indicators, as a result of a migration loss of a third of their people in two decades, these counties had moved much closer to national averages than they had been a decade earlier, but at a cost in the human resources needed to support basic social institutions.

[5]Appalachian Kentucky lost 14 percent of its 1950 population during the Fifties, but only 5 percent of the 1960 population during the Sixties. See James S. Brown, "A Look at the 1970 Census," pp. 130-1-4 in David S. Walls and John B. Stephenson (eds.), *Appalachia in the Sixties: Decade of Reawakening*. Lexington, Ky.: University of Kentucky Press, 1972. Table One.

[6]Compared with the median age of 28.1 years of people in the United States in 1970, the median in the four counties was 27.5 years. In 1960 the median age for the United States and the four counties was 29.5 and 20.5 years, respectively.

[7]Dependency ratios in 1970 for the United States and the four counties were 62.2 and 71.6, respectively, while in 1960 they were 67.1 and 80.5, respectively. The dependency ratio is the number of persons aged 14 and under and 65 and older per 100 persons aged 15-64.

Although the fertility of women of childbearing age remained higher than that of the nation throughout this period, it moved downward at nearly the same pace as the national rate.[8] In consequence, the pressure on institutions which care for the young and provide jobs when they mature has decreased, and this is quite important for the future. Also related to the decline in fertility, as well as to improved transportation and some expansion in economic activity, was an increase in employed women in these counties between 1960 and 1970. However, even in 1970, only slightly more than 20 percent of the females over 16 years of age were employed, reflecting a continuing shortage of jobs for women in the area.[9]

Since 1970, there has been another turnaround. Just as depression in the coal industry had contributed to the loss of population in earlier decades, so have improving conditions in this industry coupled with worsening conditions elsewhere brought a growth in population in the four counties, as well as to most of Appalachian Kentucky. By 1973, when the present survey was made, each of the four counties had experienced a modest growth in population and this pattern of renewal has been sustained since then.

The means from which Kentucky mountain families derived their livelihoods changed dramatically during the Sixties. By 1970 farming and farm work had become of negligible significance as a source of earned income. Seven out of ten persons in the civilian labor force were gainfully employed in business and industry, as had been the case a decade earlier, but the proportion employed by governmental agencies climbed from 11 to 20 percent. The increase exceeded national trends.

The major shift, however, was in the source of income. In the four counties as a whole, the percentage of total personal income derived from transfer payments increased from 14 to 22 percent (compared with an increase from 7 to 10 percent nationally). This change, of course, was the result of the general expansion of Social Security and other types of income maintenance programs during the Sixties. It was influenced, too, by the tendency of workers in mountain counties to retire at younger ages than in earlier years.

Owing primarily to the expansion of Federal income maintenance programs, increased employment in governmental agencies, and an increase in the number of sources from which families derived income, total family income increased more rapidly in three of the four counties during the Sixties than it did nationally. With improvement in the coal industry in the 1970s, the average family income has improved even more dramatically. Per capita income has gone up even more, because of the smaller size of households.[10] This has been translated into improved housing and more household conveniences, so that the conditions of life of mountain residents today are objectively and visibly much better than they have been in the past.

Even so, as in Appalachia generally, families in these counties still were below national standards of living. In 1969, 39 percent of the families in the four counties were below federal poverty thresholds, and in 1972 per capita incomes were still less than half the U.S. average. Thus, despite considerable improvement in economic respects, this has continued to be a depressed area. The gap between mountain families and those in the rest of the nation in these objective respects has narrowed since 1960, but it is far from eliminated.

There have also been some changes in the major institutional arenas of social life. The federal and state governments are much more visibly

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[8]The fertility rate—children under 5 years of age to females, aged 15-44 years times 1000—for the four counties in 1960 was 597 compared with 563 for the nation. In 1970 the four-county rate was 451 compared with 404 for the United States.

[9]The specific percentages of women 16 years and older who were employed in 1970 were Harlan, 20.9; Perry, 23.4; Whitley, 25.3; Wolfe, 18.6.

[10]The increase in per capita incomes from 1960 to 1970 varied from 70 percent in Harlan County to 149 percent in Wolfe County. Between 1969 and 1973, per capita incomes in Harlan, Perry, and Wolfe Counties increased more rapidly than the national rate of increase while in Whitley County the rate of increase equalled the national rate. See C. Milton Coughenour, "Measuring the quality of life for rural families," *Appalachia* 9 (February-March, 1976):1-9; Jerome Pickard, "Per capita income gap between Appalachia and U.S. diminishes," *Appalachia* 8 (June-July, 1975):29-41.

involved in local life than before. Numerous development and manpower training programs have been started. Schools have been consolidated and new community colleges and vocational schools have been located in Appalachian Kentucky. A modern hospital chain is operating in the region. Many communities have established or expanded water supplies, sewage and solid waste disposal, flood and pollution control and other services. Road systems were expanded, providing people in mountain comn.unities with easier access to county seat towns and metropolitan centers. Food stamp, school lunch, Headstart, and black lung programs were introduced and other welfare programs expanded. Each county is now a part of an area development district and a health planning region. The people in the mountains now have the opportunity to participate more fully in modern America and share its benefits (as well as its problems). So, it is against the backdrop of changes in individual welfare and institutional arrangements as well as persistent problems that the quality of life as people in these counties saw it in the early 1970s is examined.

HOW PEOPLE VIEW THE QUALITY OF LIFE IN THEIR COUNTY AND IN THE NATION

The household survey respondents who in 1973 had lived in their present county for most of the past 10 years were asked 2 questions designed to elicit their overall assessment of the quality of life in their county and the direction of change over the past decade, 4 questions about the direction of change in the QOL of specific subgroups within the county's population, and 18 questions about their assessments for specific institutional areas. Two years earlier, in 1971, 111 county "knowledgeables," officials and leaders in the four counties had been asked most of the same questions. Ostensibly, responses to these questions do not relate to people's own personal or family situation but only to their perceptions of the situation and changes for "most people" in the county, or the county in general. While it is likely that in some degree people project their assessments of their own situations into assessments of the general situation for everyone, for the most part in this analysis we take the assessments of the situations for "most people" at face value—qualified by the fact that they are subjective, verbal, and structured by the questions to be "overall" assessments.

Obviously most respondents, including "knowledgeables," have less than fully adequate knowledge of the whole county and of other areas with which it may be compared. Verbal statements may differ from "gut" evaluations to the extent that "local pride," "face," and the formal situation of an interview may intervene between the two. A respondent's temperament may raise or lower his assessments across the board, and an interviewer's skill, stance and temperament may have differential biasing effects. Forcing the respondent to weigh pros and cons and come out with an overall assessment of his county, "old people in the county," or local government in the county, may cover up important differences. But whatever people's "real" subjective assessments, the above limitations should apply more or less equally to the various subgroupings of respondents and to the various questions asked each one.

Overall Assessments of the County

Taken at face value, the responses of the household sample to the two overall questions about their county "as a place to live" and "the quality of life for most people in the county, in general and on the average," are highly favorable or optimistic (Table 1). About two-thirds perceived both as improved over the past decade and nearly three-fourths said their counties were "very good" or "pretty good" places to live. Only 5 percent rated their counties as "poor" places to live. There was, however, a general tendency among respondents in the 32-county Southern regional sample, of which the Kentucky counties are a part, to perceive the recent changes and present QOL situation highly favorably. The respondents in most of the non-Appalachian counties and states were even more optimistic in their assessments. Moreover, the officials and knowledgeables interviewed in 1971 were more optimistic than the household sample, with 86 percent (compared with 68 percent) saying the QOL had improved for most people in their

TABLE 1.–QUALITY OF LIFE CHANGES AND CURRENT SITUATION AS RATED BY EASTERN KENTUCKIANS FOR THEIR COUNTIES IN 1973.

Quality of Life for (or with respect to)	Direction of Change Since 1961			Rating of Current Situation			
	Improved	Percent Became Worse	Remained Same	Very Good	Pretty Good	Fair	Poor
1. Most people (in general)	68	17	15	*	*	*	*
2. Poor people	75	6	19	10	45	34	11
3. Young people	39	20	41	4	22	27	47
4. Old people	46	12	42	8	32	30	30
5. Black people	68	4	28	16	47	24	13
6. Physical environment	21	32	47	15	37	28	20
7. Wages and salaries	79	4	17	11	51	30	8
8. Real income	26	44	30	1	24	43	32
9. Job opportunities	47	24	29	3	26	27	44
10. Agriculture	39	35	26	5	36	33	26
11. Public schools	77	12	11	30	48	15	7
12. Post high school education	82	4	14	27	50	16	7
13. Medical care and services	63	18	19	27	33	22	18
14. Welfare programs	63	16	21	14	45	27	14
15. Transportation and roads	73	17	10	8	47	25	20
16. Public utilities	79	4	17	17	57	19	7
17. Public housing	75	8	17	11	49	26	14
18. Politics and political parties	16	23	61	4	24	44	28
19. County government	32	18	50	6	31	41	22
20. Law enforcement	27	34	39	4	29	33	34
21. Obedience to laws	22	36	42	4	34	38	24
22. Religion	44	14	42	28	47	18	7
23. Recreational opportunities	48	8	44	8	27	30	35
24. County as a place to live	63	8	29	26	46	23	5

*Question not asked.

county and only 4 percent saying it had worsened. Whether one questions or discounts these assessments to some degree, it seems clear that Eastern Kentuckians are subjectively quite "high" on their communities. Given the fact that the area is still a long way behind national norms on most objective indicators of well-being (which the people may or may not be aware of), it seems likely that the respondents were more impressed with the direction of change in recent years, as they perceived it, than with how their counties rank at present. Apparently they feel that "we've come a long way" from the conditions of 10 or 20 years ago, and the changes in objective level-of-living measures support that perception.

In their overall QOL assessments both ordinary residents and leaders in Whitley and Wolfe counties were more favorable than their counterparts in Harlan and Perry counties. At the time of the 1973 survey the first two counties were not

much involved in coal mining and, in the latter two, coal was the major industry. One wonders whether the current coal boom, which affects all four counties and has probably decreased county income differences, has increased the degree of optimism in coal mining counties.

Town residents were found to be more favorable than those in the country. Men were a little more favorable than women, and the younger persons more than the old. Among the country respondents those with better income and education and not on welfare were the most optimistic but this did not hold true in the towns.

QOL as only fair or poor. On both measures respondents were least optimistic about the situation of young people. Nearly half said their situation was poor. It should be pointed out that there were very few black respondents (in keeping with the low ratio of blacks in the area) so that the rather favorable assessments of their situation are mostly those of whites.[11] But the few blacks in the household sample and among the knowledgeables tended to agree, although less strongly, that their QOL had improved. Respondents on welfare or Social Security also tended to agree in favorably assessing their situation.

TABLE 2.--IMPROVEMENT IN QUALITY OF LIFE AND RATING OF CURRENT SITUATION FOR SPECIFIC GROUPS OF PEOPLE.

Group	Relative Perceived Improvement: Percentage "Improved" minus percentage "Became Worse"	Rank	Satisfaction with Current Situation: Percentage "Very Good" plus percentage "Pretty Good"	Rank
Poor people	69	1	55	2
Black people	64	2	63	1
Most people	51	3	*	*
Old people	34	4	40	3
Young people	19	5	26	4

*Question not asked

Assessments of Four Special Groups in the County

As to the four population groups about which the household respondents were separately questioned (Tables 1 and 2), they mostly perceived the situation of poor people and of black people in their county as improved over the decade and currently "pretty good;" but in the case of the old and the young, fewer than half of the household heads and homemakers saw the situation as improved and the great majority rated the current

Country people were more favorable as to the opportunities for youth than were those in the towns, while the reverse was the case in assessments concerning blacks. Most blacks in these counties live in the towns. There were no town-country differences in the assessments concerning

[11] There are no Negroes in Wolfe County so Wolfe respondents were not asked about blacks. In this report the terms "Negro" and "black" are used interchangeably, following the current usage of the U.S. Census.

poor people and the old. Whitley County, the only one of the four with a diversified industrial-agricultural-mining economy, stood out as most favorably assessed by its residents concerning these four groups, while Harlan, with an almost exclusively coal economy, tended to be least favorably assessed. People in the different counties were most alike in their assessments of the situation of poor people.

Assessments of Specific Aspects of Life in the County

Despite their general optimism about overall QOL changes and the current situation, the household respondents discriminated in their perception of different aspects of life in their counties. As Table 1 indicates, the proportion of respondents seeing improvement over the last decade varied from 82 percent for post-high school educational opportunities to only 16 percent for politics and political parties, and the range in those ranking the current situation as "very good" was from 30 percent for public schools down to only 1 percent for real income. Of 18 aspects of life in their counties, 8 were reported by a majority of the respondents as improved over the past decade and 10 were seen as improved by less than a majority. Similarly, 10 aspects were rated in 1973 as currently "very good"/or "pretty good" by more than half of the respondents and the other 8 aspects were so rated by fewer than half. For the most part, those aspects that most saw as improved were also rated good. In 1971 the knowledgeables similarly differentiated in their ratings and perception of improvement in the different aspects of life in their counties, although in general they tended to be substantially more optimistic about the various aspects of QOL than were the household respondents.

Even when the percentages seeing improvement are "discounted" by subtracting the percentages saying things have become worse, and when the percentages rating the current situation as "pretty good" are added to those rating it "very good" (Tables 2 and 3), the picture projected by the figures does not change much. Opportunities for post-high school education were ranked highest in improvement over the decade, followed closely by wages and income and public utilities. Improvement in "real income" was ranked lowest. The overall measure, "the county as a place to live," was "high middle" among the rankings for improvement in specific aspects of life. While the difference in the percentage seeing improvement and the percentage seeing worsening was still +75 or more percentage points in the three highest-ranked aspects, there were five aspects with negative differences—that is, more saying "worse" than "improved." Three of the latter are the related areas of politics, law enforcement, and law obedience. The other two are the physical environment and real income.

In the rankings of the perceived current situation regarding the various QOL aspects, the public schools and opportunities for post-high school education are together at the top in the percentage seeing these aspects as either "very good" or "pretty good." But "religion and churches" moved up to third place from its low-middle ranking as to improvement. "Real income" is still in the bottom rank and most of the other aspects with negative perceived differences in improvement also rank low in respondents' satisfaction with the present situation. Overall satisfaction with the county as a place to live still ranks "high-middle."

Changes in **income and wages** over the decade were viewed quite favorably by both household sample and knowledgeables, with little difference between counties, or between town and country residents. Assessments of current wages as "very good" or "pretty good" were only a little less frequent than the perception of improvement. But the proportions who said that **real incomes** had improved or were good were quite different, with very few of the household sample saying this while most of the knowledgeables still saw improvement, even when prices and buying power are taken into consideration. In Wolfe County, which changed during the decade from depending largely on agriculture to depending more on transfer payments and commuting to industrial jobs, the majority of both groups said that real income had increased.

TABLE 3.–RELATIVE PERCEIVED IMPROVEMENT AND SATISFACTION WITH THE CURRENT SITUATION FOR VARIOUS ASPECTS (DOMAINS) OF THE QUALITY OF LIFE.

Item	Relative Perceived Improvement: Percentage "Improved" minus percentage "Became Worse"	Rank	Satisfaction with Current Situation: Percentage "Very Good" plus percentage "Pretty Good"	Rank
Post high school education	78	1	77	2
Wages and income	75	2.5	62	6
Public utilities	75	2.5	74	4
Public housing	67	4	60	7
Public schools	65	5	78	1
Transportation and roads	56	6	55	9
County as a place to live	55	7	72	5
Welfare programs	47	8	59	8
Medical care and services	45	9	50	11
Recreational opportunities	40	10	35	15
Religion	30	11	75	3
Job opportunities	23	12	29	17
County government	14	13	37	14
Agriculture	4	14	41	12
Politics and political parties	-7	15.5	28	18
Law enforcement	-7	15.5	33	16
Physical environment	-11	17	52	10
Obedience to laws	-14	18	38	13
Real income	-18	19	25	19

Job opportunities were seen as improved by about half of the household respondents, while about a quarter said they had worsened. However, the most notable differences for both the household sample and the knowledgeables were between the highly optimistic assessments in the non-coal counties and the pessimistic assessments in the mining counties, especially Harlan. No doubt if the study had been made in 1975 or 1976 this would have been different.

In regard to **agriculture and land use**, also, the rather unfavorable perceptions for the four counties as a whole are somewhat deceptive, since in the non-mining counties both groups of respondents tended to see improvement and at least a "pretty good" situation in 1973, while most of those in the mining counties assessed things unfavorably. Since Harlan and Perry counties have never had much agriculture, people were probably reacting as much to that as to present and recent conditions or changes.

The assessments of changes in **transportation and roads** were highly favorable and those of the current situation were moderately so. However, in the two coal counties substantially fewer made favorable assessments than in the other counties.

The assessments concerning **public utilities** were even more favorable and there was little variation between counties and types of respondent.

Perceptions of change and current quality were highly optimistic with regard to the **public schools,** with large majorities of each group in all counties seeing improvement and saying that the schools in their county were "very good" or "pretty good." Even more of the knowledgeables than of the household sample saw improvement, and the two groups rated the schools' current quality about equally high. Opportunities for **post-high school education** available to youth in their counties were more optimistically viewed than any other thing we asked about, with overwhelming majorities making favorable assessments.

Less than half of either group saw improvement in **churches and religion** in their counties, although three-quarters of the household sample rated the current situation as "very good" or "pretty good." The general tendency was to rate this aspect of life as "about the same" and "pretty good."

Substantial majorities of both groups perceived improvement in **medical care and health services** during the past 10 years but the knowledgeables were considerably more unanimous in this. Sixty percent of the household sample and similar proportions of the knowledgeables rated current medical care and services in their counties as "very good" or "pretty good." In both assessments Harlan County, site of a major unit in the Appalachian Regional Hospitals chain, stood out for its much more favorable ratings. The presence of a smaller unit of the same chain in Perry County did not seem to boost ratings there. In all counties but Harlan 20 percent or more of the household sample said medical care was poor.

Welfare services were rated similarly to health services, by both groups. None of the knowledgeables was a welfare recipient but a substantial proportion of the household sample were. There seemed little evidence that many respondents were ranking the welfare situation poorly because they felt that too many people were on welfare or that dependency was being encouraged. A specific type of welfare program, **public housing,** was rated even more favorably than welfare programs in general, with three-fourths of the respondents saying it had improved and three-fifths rating the situation as good. In some of the counties the first public housing had been built during the decade. As previously mentioned, large majorities of both groups said that the quality of life for "poor people" had improved, and more than half of the household sample saw the situation of the poor as "very good" or "pretty good."

Relatively few members of either group saw improvement in their **county government** or felt it was good. The household respondents were more pessimistic about this aspect. The most frequent responses were that county government had remained the same and was "only fair." Whitley County's government was most favorably perceived, Wolfe County's least so. County **politics and political parties** were similarly assessed but even more negatively. In Whitley County the knowledgeables were rather favorable about county politics, the ordinary residents not.

As to local **crime and law enforcement** the assessments were also generally unfavorable, those of ordinary residents being most so. In every county, as many of the ordinary people said things were worse as said they were better, and big majorities thought the situation "only fair" or "poor." Again, Whitley County was seen most favorably and Wolfe least so.

About half of each group saw improvement in **recreational opportunities** but only a third of the household respondents rated the current situation as good. Perceptions were most favorable in Whitley County, least so in Harlan.

About a third each of ordinary residents and of knowledgeables felt that the **physical environment** in their counties had deteriorated over the past decade. Very few ordinary residents saw it as improved, but most of both groups still rated it as good. The knowledgeables were more likely than others to say it had improved and was currently "very good." Most of the 20 percent of the residents who said the environment was "poor" were in the mining counties. In Perry County even among the knowledgeables a third said it was poor.

As the above summary makes evident, there

was a general tendency for the knowledgeables and leaders to be more favorable than the household sample but, for the most part, both groups were quite favorable. Even so, fewer than half of both groups saw improvement in county government, local politics, crime and law enforcement, agriculture and land-use, and churches and religious life.

It seems clear that the quality of life in these counties was rated better by the people who live there than it is rated on the basis of objective indicators such as income, employment and education, using national or state norms and rankings. It seems that the perception that things have been moving in the right direction may account for the general optimism.

The fact that neither knowledgeables nor ordinary people are uniformly favorable, that they do rate some aspects of life unfavorably, and that there were fairly consistent differences between the two mining counties and the other two suggests that subjective indicators have some validity and usefulness and are not just given "off the top of the head." The tendency for knowledgeables to be more optimistic may reflect their greater ego involvement or vested interest in the state of things in their counties, differences in socioeconomic status, greater knowledge, or more careful assessments on their part.

Ratings of Specific Aspects as Related to the Overall Rating of the County as a Place to Live

As graphed in Figure 1, the person's overall assessment of the community represents his combined assessment of its various aspects. While we have not tapped all aspects of community, one may reasonably ask whether the ratings of those about which we have asked are related to the overall rating of, or satisfaction with, the community. For people in all of the counties combined, the degree of satisfaction with each of the aspects—religion being the only exception—is significantly related to overall satisfaction with the county as a place to live. There is some difference from county to county in the extent to which this is so. In Harlan county, all but one of the aspects was significantly related to overall satisfaction with the county. In Perry, Wolfe, and Whitley counties, overall satisfaction was unrelated to satisfaction with four, five, and seven, respectively, of the particular aspects of county institutions and life situations. The institutional aspects of communities, of course, differ as well as do the needs of people. These differences are reflected in variation in the public ratings of the county and its aspects, and it would be surprising if this were not so.

Despite the differences among the counties, they are all in Appalachia and have many similarities. There should be consistencies in the bases of public assessments, which reflect commonalities of situations and needs, and such is the case. Seven aspects of community life are significantly related to overall satisfaction with the county in each of the four counties—politics and political parties, county government, crime and obedience to laws, job opportunities, public housing, recreational opportunities, and the quality of life for old people.[12] Perhaps it is less surprising to find that politics, jobs, housing, and QOL of the elderly are consistently related to overall satisfaction than that income is not. Whitley county residents, unlike those elsewhere at the time, did not seem to link their overall rating of the county to their assessments of the wage and salary or real income situation, although, like people in the other counties, they differed in their assessment of wages and real incomes and, in general, did not rate them more favorably than did others. The consistency of the way in which people rate their county and recreational opportunities may surprise those not familiar with this aspect of mountain life, but the opportunities for entertainment, especially for youth, are notoriously poor, and the felt need is quite strong.

One may thus conclude that most aspects of community are related in some degree to the person's assessment of the county as a place to live in general, but in the mountain counties political affairs, jobs, housing, recreation, and the situation of the elderly are most consistently associated with the way people rate their county. Other aspects of community vary in their relevance to county QOL,

[12]For the total sample the correlations between the ratings for each aspect and the overall county rating range from 0.21 to 0.27, which is moderately large for this type of opinion survey.

being important in some counties and not in others.

Assessments of Life in the United States

Three questions from the 1971 national sample survey of the Institute for Social Research, University of Michigan, were used verbatim in our 1973 household survey. These asked whether respondents believed life in the U.S. was getting better or worse. Our respondents were all household heads and homemakers while the ISR sample was designed to be representative of the adult national population. The fact that the surveys were about two years apart means that some of the differences between the responses of the two samples could be due to the different local, national, and world context in which they answered the questions.

Our Eastern Kentucky respondents ranked much lower on "objective" measures of education, income and level of living than a national sample, while their perceptions of QOL trends in the U.S. were substantially more favorable than those of the ISR respondents (Table 4). For both samples the most frequent assessment of the trend of "things in the U.S." was that they were "staying the same" or "some better, some worse," but 12 percent more of the Eastern Kentuckians than of the national sample said things in the U.S. were "getting better" and 10 percent fewer said they were "getting worse." Yet the Eastern Kentuckians were far more likely to say that things in their *own* county had improved over the past decade, with two-thirds saying this as compared with three-tenths saying that things in the country as a whole were getting better. Also, fewer saw things in their own county as getting worse than said this for the nation, and far fewer said the QOL in the county had remained

TABLE 4.–OVERALL ASSESSMENT BY EASTERN KENTUCKIANS OF QUALITY OF LIFE TRENDS IN THE UNITED STATES AND IN THE RESPONDENT'S OWN COUNTY, 1973.

Question: (ISR and Southern Study)	"All things considered, do you think things (in the U.S. as a whole) are getting better or worse, that they are staying about the same, or what?"
Question: (Southern Study)	"In general and on the average, would you say that the quality of life for most people in this county has improved, gotten worse, or remained about the same during the past 10 years?"

	Things in the U.S.			QOL for Most People in the County		
Trend	ISR National Sample, '71	Southern Rural Sample '73	Eastern Kentuckians, '73	Trend	Southern Rural Sample '73	Eastern Kentuckians, '73
	Percent				Percent	
Getting Better	17	22	29	Improved	72	63
Getting Worse	36	21	26	Gotten worse	12	21
About the same	25	22	21			
	>47	>57	>45	Remained same	16	16
Some better, some worse	22	35	24			
	100	100	100		100	100

the same. The Kentuckians were a little more favorable toward QOL trends in the U.S. than were the other respondents in the Southern Regional Study.

In both studies the open-ended questions, "Do you think there are some ways in which life in the United States is getting worse?" and "Are there some ways in which life in the United States is getting better?" were asked prior to the overall assessment question just discussed. On these latter questions no answers were suggested, no checklist provided. The Kentucky respondents were considerably *less* likely than the national sample to name any ways in which they thought life in the U.S. was getting *worse*, but about *equal* proportions of both samples did not name any ways in which life in the U.S. was getting *better*. Kentuckians also differed in some ways from the national sample in the *types* of things they mentioned.

As compared with the national sample, the Appalachian Kentuckians who responded (Table 5) were much less likely to see **living conditions** (the economy, jobs, environment) as getting worse and equally likely to say they were getting better. They were much less likely to name **protests and protest movements** as a way in which life in the U.S. was getting worse but much more likely to say **government and politics** were worsening. On the other hand, the Kentuckians less often saw **people's behavior and attitudes** as getting better. However, the same two types of things were mentioned most often by both samples as ways in which life in the United States is getting *worse*. These were (1) people's behavior and attitudes, and (2) living conditions in general. Similarly, the two samples agreed in mentioning the same two types of things most often as ways in which life in the U.S. is getting *better*—(1) living conditions, and (2) education, science, and technology.

Thus Eastern Kentuckians perceived QOL trends in the U.S. as a whole more favorably than did a national sample two years earlier, but they assessed trends in their own counties even more favorably. As to the specific ways in which the two groups saw things as getting better or worse, they tended to agree in the things they named most often and least often, but they varied in the absolute frequency with which they mentioned these things and in the relative frequency with which they mentioned things of intermediate significance. Since the intermediate categories include types of things that became more or less visible in 1973 than they had been in 1971 (protests, the draft and the Vietnam War, national government and politics, crime and justice), it seems that the two samples are more similar than different in their perception of the basic ways in which things are getting better or worse. It is perhaps remarkable that relatively poor rural mountain people are more optimistic than people in general about the quality of life, but also remarkable that the two agree so closely as to the specifics.

HOW PEOPLE VIEW CHANGE IN THE QUALITY OF THEIR PERSONAL AND FAMILY LIFE

Satisfaction with personal and family life

In objective respects, as we have seen, the quality of life for most families had improved considerably during the past decade. This improvement seems reflected in their subjective assessments of personal progress. When respondents were asked whether in comparison to a decade ago they were better off or worse off, their responses were:

Much better off	**19 percent**	**60 percent**
Somewhat better off	**41 percent**	
About the same	**29 percent**	
Somewhat worse off	**8 percent**	**11 percent**
Much worse off	**3 percent**	

Clearly, few thought they were worse off and the great majority felt that they were better off, that in balance their personal quality of life had improved. Residents of country areas were as likely to express this feeling as those in the towns.

In 1961 and 1973 family heads and homemakers living in the country were asked about the extent of their satisfaction with their current income and whether they felt that they had to go without the necessities of living. Although dollar incomes had substantially increased, the propor-

TABLE 5.—WAYS IN WHICH LIFE IN THE UNITED STATES IS SEEN AS GETTING WORSE OR BETTER.

	Percentage of Respondents Mentioning Each Type of Thing*			
	Worse		Better	
	ISR National Sample '71	Eastern Kentucky Sample '73	ISR National Sample '71	Eastern Kentucky Sample '73
Behaviors and Attitudes of Individuals in Social Situations (drugs and alcohol, values and morals, "modern life," youth, minorities, family, religion)	52.4 (1)	35.6 (1)	10.6 (3)	4.3 (3)
Protests and Protest Movements (racial protests, racial situation, student protests)	18.7 (4)	4.7 (5)	5.5 (4)	3.9 (4½)
War, Draft, Military	6.4 (6)	1.1 (6)	1.1 (6)	3.9 (4½)
Law, Police, Courts, Crime, Justice	24.3 (3)	18.8 (4)	0.8 (7)	0.6 (7)
Living Conditions, (poverty, welfare, inflation, taxes, wages, jobs, population, urban conditions, natural resources and ecology, health, housing)	48.1 (2)	25.0 (2)	42.8 (1)	42.5 (1)
Government and Politics	13.9 (5)	19.2 (3)	2.7 (5)	1.9 (6)
Education, Science, Technology (schools, science, home conveniences, goods and services)	4.0 (7)	0.6 (7)	29.2 (2)	19.4 (2)
Did not mention any ways	13.0	27.7	38.0	37.9

*Percentages are based on the unduplicated number of respondents who mentioned one or more things in a particular category. The numbers in parentheses are the frequency rankings of each category of responses.

tion feeling that their income was unsatisfactory had not changed—about three out of ten felt this way in both years. Surprisingly, despite their relatively low incomes compared with national standards, most people in both years felt that their income was satisfactory.

Nevertheless, when these heads and homemakers assessed their incomes in relation to what they perceived as the necessities of living they saw the situation differently. This was especially so in 1973, when more than half felt that their incomes were not sufficient to provide for all their needs.[13]

[13] C. Milton Coughenour, *Quality of Life of Country Families in Four Eastern Kentucky Counties: Change and Persistent Problems, 1961 and 1973.* Lexington, Ky.: Department of Sociology, University of Kentucky, Agricultural Experiment Station, RS-46, September 1975. Table 1.

Those living in towns in 1973 were more often satisfied with their incomes and fewer felt that they had to go without necessities than did the country residents.

For both groups, satisfaction with incomes and feelings of deprivation were significantly related to per capita income, and the differences between town and country residents in this respect accounted for most of the difference in subjective satisfaction. Although this might be expected, the more important finding is that concern with providing for the necessities of living was not the principal determinant of perceived satisfaction with one's income. While the extent of satisfaction with income has remained relatively constant, the gap between income satisfaction and the requirements of living has expanded. The needs of mountain people have increased more rapidly than their incomes, but viewed by itself the progress in increasing family income has restrained increased dissatisfaction. Their views in this respect are related to the differences reported earlier with respect to improvement in, and current satisfaction with, wages and salaries and "real" incomes in the county. While many felt that wages and salaries had improved and that the current situation was fairly satisfactory, relatively few felt this way about what they could purchase with the income they received.

For two decades or more Eastern Kentucky has been regarded as a depressed area and the above may suggest that mountain people have increasingly come to feel deprived of the necessities of living. The degree of satisfaction with the quality of their personal life is thus an important issue. How does it compare with the current level of satisfaction, perceived progress, and hoped for attainments in the future of people throughout the United States? The responses of Eastern Kentucky heads and homemakers in 1973 to the Cantrill ladder-scale questions, and of people surveyed nationally from 1959 to 1974, help answer these questions (Table 6).[14]

Nationally, the average ratings of present well-being declined slightly from the mid-1960s through 1972 but rose to near the 15-year median in 1974. On the average people gave lower ratings to their personal and family well-being 5 years earlier than to that of the present, indicating in each survey that they felt that personal well-being had improved. The ratings of past well-being also have declined so that, except in 1974, the progress in well-being as it has been subjectively experienced remained nearly constant. That people as a whole did not rate their present well-being higher indicates that most felt there was room for further improvement, and this is reflected in the higher ratings given to the well-being hoped for in the future. Notably, except for 1974 again, people in the United States were more optimistic about the future than about progress in the past. In 1974, during the midst of the recession, people were less optimistic that the future would bring an improvement in personal and family well-being equal to what they had experienced in the past (the shift from present to future was only +0.8 compared with a shift of +1.1 from past to present). Thus, although the average ratings on the whole reflect a rather remarkable stability in the feeling of well-being of people in the United States, the differences over time have tended to oscillate with periods of boom and recession in the American economy.

Eastern Kentuckians rated their personal well-being at a time when "stagflation" was at its height and the coal industry was just beginning to experience the recent boom in coal prices. Remarkably, the heads and homemakers of mountain families rated their present well-being at almost the same level as the national sample had a year earlier, and they felt that they had enjoyed as much improvement during the preceding 5 years. However, they were not nearly as optimistic then about the possibility of future improvement, and the extent of their optimism then equalled that of people throughout the nation a year later when the economy was depressed. While comparable information over several time periods is lacking, at least in 1973 the average ratings of well-being of mountain people were relatively flat—only 1.6 points separate past and future—by comparison

[14] The national surveys in 1959 and 1964 were conducted by the Institute for Social Research, University of Michigan and those since then by Potomac Associates. See William Watts and Lloyd A. Free, *State of the Nation 1974*. Washington, D.C.: Potomac Associates, 1974, pp. 10-11.

TABLE 6.—LADDER RATINGS OF PERSONAL QUALITY OF LIFE, SELECTED YEARS 1959 TO 1974 FOR THE UNITED STATES AND EASTERN KENTUCKY.

Year	Past	Present	Future	Shift, Past to Present	Shift, Present to Future
U.S., 1959	5.9	6.6	7.8	+0.7	+1.2
U.S., 1964	6.0	6.9	7.9	+0.9	+1.0
U.S., 1971	5.8	6.6	7.5	+0.8	+0.9
U.S., 1972	5.5	6.4	7.6	+0.9	+1.2
E.Ky., 1973	5.5	6.3	7.1	+0.8	+0.8
U.S., 1974	5.5	6.6	7.4	+1.1	+0.8

Source for the United States: William Watts and Lloyd A. Free, *State of the Nation 1974,* Washington, D.C.: Potomac Associates, 1974. Table 1, p. 11.

with subjective well-being as it has been expressed by people in the United States as a whole. In this respect the subjective feeling of well-being of mountain people had less of the qualities of progress and optimism than was true of the American people as a whole.

The average ratings, of course, cloak much individual variation in experiencing past progress and future optimism. Proportionately fewer people in Eastern Kentucky than in the nation in 1974 felt that the quality of life had improved over the preceding 5-year period (41 to 54 percent); more felt that it had remained the same (35 to 23 percent), while almost the same minority in each case (20 and 19 percent, respectively) thought it had worsened.[15]

When the differences in time frames are considered—5 vs. 10 years—Eastern Kentuckians' overall assessments of progress during past years derived by the two types of measurement seem quite compatible. Sixty percent indicated that they were "better off" now than a decade earlier, compared with 41 percent who rated their personal well-being higher than 5 years earlier. Moreover, in response to the 5- and 10-year questions, 29 percent and 35 percent, respectively, indicated that the conditions of their personal lives had not changed. The similarity of the assessments bolsters confidence that the feeling of progress in quality of life is not merely an artifact of the type of question to which mountain people responded,[16] and that a substantial proportion did indeed feel that it had improved.

But, how do the mountain people differ individually in their future expectations, especially when compared with people throughout the nation in 1974? In this respect, a substantially higher proportion of the people in the mountains than in the nation expected the quality of personal life to improve (39 percent to 16 percent), and fewer by an equal margin thought it would remain the same (37 to 61 percent). Only 14 percent in the mountains and 12 percent nationally expected the quality of their lives to become worse in the next 5 years.[17] About the same proportion of the mountain residents thus expected future improvement as had experienced progress during the past, and, in general, mountain people in 1973 were more often optimistic about the future than were people throughout the nation a year later.

[15] An equal proportion—4 percent—of the Eastern Kentucky and national samples did not respond to one or both of the two latter questions.

[16] The two measures of progress in quality of life are moderately correlated (gamma = 0.42).

[17] Ten percent and eleven percent of the Kentucky and national samples, respectively, did not respond to one or both of the questions about their present and expected future situations.

Thus, the survey information on the personal quality of life suggests that more of the people in the mountains than in the nation were pessimistic about past improvement but optimistic about the future. While this may be interpreted in various ways, we believe that in large part it reflects a growing optimism of mountain people derived primarily from the progress in objective respects that has taken place in the conditions of life in the mountains during the past decade.

What groups in the mountains were most satisfied with the quality of their personal lives? Who were the pessimists and optimists, and how do the differences among various groups compare with those in the nation? In the mountains the level of present satisfaction was significantly higher for those with 9 or more years of education, incomes of $6,000 or more, in white collar or business and professional occupations, and living in the towns and cities—and it would be surprising if this were not so. Differences between men and women, age groups, home owners and non-owners were small. In the *State of the Nation* reports for 1972 and 1974, Watts and Free report that the national samples differed (or did not differ) in similar ways. In the mountains those least satisfied were the families with incomes below $2,000, whose present satisfaction averaged 5.0 compared with an average of 6.9 for families with incomes of $6,000 or more. The scale of income on a national basis was much higher in both 1972 and 1974, but income differences also more sharply separated the most from the least satisfied groups than did any other factor. Thus relative poverty or affluence, more than any other factor, seems to determine subjective personal-family well-being.

In the mountains, heads and homemakers under 45 years of age expressed the greatest sense of personal progress and optimism about the future. For them there was a shift of 1.5 points from the past to the present and a further shift of 1.5 points was expected in the future. By contrast, for heads and homemakers 65 years of age and older the average past, present, and future ratings were almost the same. Personal satisfaction with progress and optimism for the future are thus especially characteristic of people before middle age. This is even more evident when ratings for a broader range of age groups are available, as in the national samples. Watts and Free summarize the situation this way:[18]

> The greatest sense of both personal progress and optimism about the future was evident . . . among young people (eighteen to twenty-nine years of age). In contrast, the elderly (sixty-five and over) saw no progress from past to present and also anticipated no future improvement whatever in their lives. Indeed, among all those fifty years of age and over, whose lives generally are already highly stabilized, the general feeling was that the most they could expect was to hold their own. Hope, it appears, is chiefly a prerogative of the young.

Among the Eastern Kentucky residents the contrasts between income and occupational groups in the sense of progress and optimism about the future also are striking. The highest income group ($6,000 or more), which was most satisfied at the present time, also had experienced considerable improvement (averaging 1.4 points) in well-being over the preceding 5 years, and they anticipated further improvement in the future (1.0 points). On the other hand, the lowest income group (under $2,000) was the only group which had experienced negative progress (-0.2) from past to present, and they foresaw only a modest improvement in the future (0.7 points). Once again, this difference parallels that for people throughout the United States.

Both nationally and in the mountains, white collar workers felt they had made more progress than did blue collar workers, though they were not a lot more optimistic about the future. Those least optimistic in their assessments and projections were the non-working persons—the unemployed, disabled, retired, and non-employed homemakers. Despite the blue collar workers' somewhat lower assessment of past progress and despite what has been written in recent years about the dissatisfaction and alienation of such workers, both nation-

[18] *State of the Nation* 1974, p. 12.

ally and in the mountains, these workers felt that they had progressed a full step or more on the ladder during the past 5 years and they anticipated like improvement in the future. As Watts and Free point out,[19]

> Such feelings of both progress and optimism raise doubts about whether this segment of our population is in fact experiencing the sense of frustration or futility so often ascribed to it.

These findings for subgroups within the population probably help to explain why the average ladder scores of Eastern Kentuckians are lower than those for the nation: the groups that are most satisfied with past progress and most optimistic about the future—those that are younger and have relatively higher income, occupation and education—are most underrepresented in Appalachia owing to long-term economic depression, lack of economic development, and high outmigration of youth. If economic conditions continue to improve, the level of satisfaction and perceived progress and optimism of mountain people may soon be indistinguishable from that of other Americans on the average, if, indeed, this is not already the case.

Images of the Future: "Hopes" and "Fears"

While the ladder ratings tell us about the similarities and differences in the overall QOL assessments among various groups in the mountains as compared with people throughout the nation, they do not inform us about whether mountain people and those elsewhere had a similar or different outlook on life. Each person was asked about his/her hopes and fears for the future before he/she was asked to indicate the level of satisfaction with the present, past, and future.[20] The ladder scores thus represent progress and optimism with respect to these hopes and fears, and, regardless of the similarity in ratings, the quality of life for individuals differs to the extent that the anchoring images for the ratings differ.

The personal hopes mentioned by five percent or more of the respondents in each of the five national surveys along with those mentioned by our Eastern Kentucky respondents in 1973 are shown in Table 7; the corresponding list of fears appears in Table 8.[21] While some individuals primarily have only one or two concerns, others may have several. The percentages indicate the relative frequency with which each hope or fear was mentioned, so that the larger the percentage, the more widespread the concern within that group.

The number of concerns mentioned by each respondent is, of course, related to verbal facility and this, in turn, is related to education. Higher educational levels in the U.S. are reflected in a greater volume of concerns as reported in national surveys. But in 1973 the educational level of the Eastern Kentucky respondents was still lower than that of the national sample in 1959, so that the Eastern Kentuckians mentioned fewer hopes and fears and direct comparison of percentages may be misleading. To facilitate the assessment of the relative importance of the national and regional hopes and fears, the percentages in Tables 5 and 6 are ranked.

The hopes for the future of heads and homemakers in Eastern Kentucky were principally centered around aspirations (economic and educational) for their children. In terms of percentages, aspirations for children were more than twice as important as the next most important concern—a better standard of living. The concern with a better level of living is also reflected in the more specific concerns with owning a home or living in a better one, and in having a good job. Personal health and that of one's family, however, rank along with

[19] *State of the Nation* 1974, p. 12.

[20] The question was: "All of us want certain things out of life. When you think about what really matters in your own life, what are your wishes and hopes for the future? In other words, if you imagine your future in the best possible light, what would your life look like then if you are to be happy?" Second, "Taking the other side of the picture, what are your fears and worries for the future? In other words, if you imagine your future in the worst possible light, what would your life look like then?"

[21] A few items mentioned by 5 percent or more in only one or two national surveys are omitted.

material conditions in their perceived importance for future well-being. Of these three areas of concern—aspirations for children, level of living, and health—health is most often a concern of the elderly while female respondents, those with higher per capita incomes, and the younger heads and homemakers (aged 44 years or less) most often mentioned aspirations for children. A better standard of living was of nearly equal interest to all categories of people.

The 1973 hopes for the future of mountain people more closely resemble the national sample's concern in 1974 than they did those of 1972. The top three 1973 concerns of mountain people were also the top three hopes of the 1974 national sample, although mountain people were much more concerned about the future well-being of their children and less so about their own standard of living and health. The principal difference between mountain residents in 1973 and those in the nation in 1972 was that the hope for peace in the world was a major pre-occupation of people nationally but was rarely mentioned by people living in the mountains. In fact, except for the issue of peace and war, which was important nationally in both 1971 and 1972, the relative priority of hopes for the future exhibits considerable similarity throughout the 15 years covered by these surveys. Moreover, in the United States, as in the mountains, age groups differed in their concern with the well-being of their children.[22]

The major fears of heads and homemakers in the mountains parallel their hopes, although the most frequently mentioned fears concerned poor health for oneself or family rather than aspects of their children's lives or family's standard of living (Table 8). All age groups were equally preoccupied with worries about the possibility of poor health, and the pocketbook issues—jobs and standard of living—were of equal concern to all age, education, and income groups.

Personal health has been a very important concern of people in the United States in every survey, as it was of mountain residents. But in other respects Eastern Kentuckians and the national samples differ somewhat more in their specific fears than in their hopes for the future. Nationally, people have more often been worried about the possibility of war, economic instability, and lower standards of living than has been the case in the mountains. It is doubtless true that where levels of living are already low, as in the mountains, fear of decline is less likely to be a worry than among people who have become used to more.

In substantial degree, the images of the future held by heads and homemakers in Eastern Kentucky are constructed around the major themes of health and economic conditions, each theme having two principal foci of interest: oneself and one's family, especially one's children. In addition, there is a generalized concern for the character, happiness, and opportunities of the children. The familistic orientation of mountain people contrasts with the national sample's greater preoccupation with issues such as war, pollution, crime, distrust of political leaders, and economic depression. These differences both emphasize the distinctive regional orientations and problems still prevailing in Eastern Kentucky, and suggest a reason for the somewhat lower satisfaction with the past and present quality of life and the relative lack of optimism with which the future is regarded.

PERCEIVED QUALITY OF LIFE AND FUTURE DEVELOPMENT

Assessing the practical implications and applications of our data requires attention again to questions raised at the beginning of this report concerning alternative measures of the quality of life: Which are more valid, reliable and useful—objective or subjective indicators—or how can the two be used together? Are people's perceptions of the trend or their assessment of the current situation the more accurate reflections of how they really feel about their communities and areas? How should one weigh the respondent's assessment of whether things have improved in recent years for

[22] *State of the Nation 1974*, pp. 261-262.

TABLE 7.--PERSONAL HOPES OF PEOPLE IN EASTERN KENTUCKY IN 1973 AND SELECTED YEARS FOR THE NATION, 1959 TO 1974.

	U.S. 1959		U.S. 1964		U.S. 1971		U.S. 1972		E.Ky. 1973		U.S. 1974	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
Aspirations for children	29	(3)	35	(2)	17	(4)	23	(4)	57	(1)	24	(3)
Better standard of living	38	(2)	40	(1)	27	(2)	29	(2)	25	(2)	29	(1)
Good health for self	40	(1)	29	(3)	29	(1)	27	(3)	18	(3)	28	(2)
Good health for family	16	(6)	25	(4)	13	(6)	12	(6)	17	(4)	11	(6)
Own home or live in better one	24	(4)	12	(7)	11	(7)	12	(6)	11	(5)	11	(6)
Good job; congenial work	7	(10)	9	(8)	6	(10)	10	(7)	7	(6)	11	(6)
Happy family life	18	(5)	18	(5)	14	(5)	18	(5)	6	(7)	15	(5)
Peace in world; no war	9	(9)	17	(6)	19	(3)	32	(1)	*		9	(7)
Leisure time; recreation; travel	11	(7)	5	(11)	6	(10)	8	(8)	*		9	(7)
Happy old age	10	(8)	8	(10)	6	(10)	6	(10)	*		8	(8)
Peace of mind; emotional stability	5	(11)	9	(8)	8	(8)	7	(9)	*		9	(7)
Economic stability in general	*		*		6	(10)	7	(9)	*		15	(5)
Wealth	*		5	(11)	7	(9)	8	(8)	*		*	(8)

*Mentioned by less than 5 percent.

Source: National percentages from Watts and Free, *State of the Nation 1974*. Table 8 (abridged).

TABLE 8.--PERSONAL FEARS OF PEOPLE IN EASTERN KENTUCKY IN 1973 AND SELECTED YEARS FOR THE NATION, 1959 TO 1974.

	U.S. 1959		U.S. 1964		U.S. 1971		U.S. 1972		E.Ky. 1973		U.S. 1974	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
Ill health for self	40	(1)	25	(2)	28	(1)	21	(2)	38	(1)	25	(2)
Ill health for family	25	(2)	17	(4)	16	(4)	12	(4)	38	(2)	12	(5)
Inadequate opportunities or unhappiness for children	12	(5)	10	(6)	8	(7)	8	(7)	20	(3)	10	(6)
Problem in family; drugs; take to crime	*		*		7	(8)	9	(6)	9	(4)	5	(9)
Lower standard of living	23	(3)	19	(3)	18	(2)	18	(3)	9	(4)	16	(4)
Unemployment	10	(6)	14	(5)	13	(5)	10	(5)	8	(5)	12	(5)
War	21	(4)	29	(1)	17	(3)	28	(1)	*		18	(3)
Economic instability in general	*		*		11	(6)	9	(6)	*		26	(1)
Crime	*		*		5	(9)	8	(7)	*		9	(7)
Pollution	*		*		7	(8)	6	(8)	*		*	
Political instability	*		*		5	(9)	5	(9)	*		6	(8)

*Mentioned by less than 5 percent.

Source: National percentages from Watts and Free, *State of the Nation 1974*. Table 9 (abridged).

him and his family versus his perception of recent changes for "most people in the county"—or either of these against his satisfaction with his job and his hopes and fears for the future? Can we assume that the respondent's perceptions and assessments of each institutional area equally influence his overall evaluation? Do Eastern Kentuckians really view life in the United States more favorably than do the U.S. people in general, or is the time difference in the two surveys responsible? Most importantly, how can all of the data be used to maintain or increase people's motivation to improve, and to maximize the balance between constructive dissatisfaction and debilitating frustration?

The evidence from our study strongly suggests that subjective assessments represent something real, as the authors of *The Quality of American Life* believe and document. The answers to many different questions corroborate that Eastern Kentuckians view their communities and their personal life situations much more favorably and optimistically than might be indicated by comparative objective data. Yet it is not blanket approval, in that they view some aspects of their life pessimistically and disapprovingly. They may not have very accurate information about how their counties compared with the rest of the country on objective measures and they might be less satisfied if they did, but it seems that for most of them a more relevant reference point is their perception of the direction of change—the degree of "progress"—from the recent past to the present. Thus, if public officials and development agencies are to have the support of local people in their efforts, or wish to see "results" in the felt well-being of people, the perception of progress and the hopefulness about the future may be as important as the objective change.

Overall, our data indicate that Eastern Kentuckians' perceived quality of life is not greatly different from that of people in the country as a whole, nor is it in stark contrast to the picture reflected by objective conditions. During recent years Eastern Kentucky has been the focus of a wide variety of programs designed to improve the quality of life, and it is apparent that the progress in many objective respects is reflected in perceived progress in institutional aspects and in the quality of people's personal lives.

Nevertheless, the progress as it is subjectively experienced is quite uneven. In addition to wide variations in the average evaluations of different institutional spheres, people's views vary by age and socioeconomic class levels. The quality of life in the mountains is widely regarded as being least satisfactory for young people, and the latter tend to be least satisfied with their own quality of life while at the same time expressing the greatest optimism for the future. The elderly, while having a higher level of present satisfaction, are resigned to little or no personal improvement in the future and hope primarily for good health and a better future for their children.

The authors of *The Quality of American Life* conclude that the main policy relevance of their data is to provide a more "enlightened" understanding of the human condition for long-range planning rather than to provide basic "intelligence" for immediately policy recommendations.[23] This is surely true for the most part in the present case. Nevertheless, our data should help in developing answers to several questions which are important in the formulation of social policy.

In attempting to bring the data to bear on the prospects and strategies for development programs, an important principle to remember is that the impetus for change and development grows out of people's dissatisfactions and their aspirations for improvement. A related principle is that QOL improvement in objective respects does not necessarily produce a higher subjective QOL, or vice-versa. Indeed, improvement may create new needs and increase aspirations. While new needs can depress present satisfaction, they can also expand optimism that the future may bring greater improvement. This is the phenomenon of "rising expectations" which characterizes the early stages of development in underdeveloped countries throughout the world.[24] These two principles

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[23]Campbell, Converse and Rodgers, *op. cit.*, pp. 496ff.

[24]Daniel Lerner, "Toward a communication theory of modernization," in Lucien W. Pye, *Communication and Political Development.* Princeton, New Jersey: Princeton University Press, 1963; Daniel Lerner, "International cooperation and communication in national development," in Daniel Lerner and Wilbur Schramm (eds.), *Communication and Change in Developing Countries.* Honolulu, East-West Center Press, 1967.

should aid in the assessment of mountain people's general readiness to support developmental efforts, the particular groups most likely to support such programs, and the particular aspects of life in which developmental efforts are likely to attract the most followers.

While dissatisfaction coupled with aspirations for future improvement provides the motive force for development, not all aspects of life with which the individual may be dissatisfied become foci of developmental concerns. Some, such as chronic ill-health or family conflict, may be beyond the reach of direct public policy intervention, and others, such as governmental corruption, may be regarded by people as traditional problems about which nothing effective can be done. Thus, only those aspects of life regarded as amenable to modification and development become public foci of developmental concerns. Focused dissatisfaction, however, is dynamic, and some of the aspects of life, which at one time may be regarded as intractable, later on may be felt to be susceptible of improvement. Policy makers thus must be alert to the shifting foci of dissatisfaction and aspiration as the conditions of life and the needs of the people themselves change in response to progressive development.

From this perspective, do mountain people seem resigned to their fate, filled with despair, and lacking in optimism for a better future as some contended in the 1960s?[25] As a general description of the state of mind of people in the mountains in the 1970s such a conclusion seems far from true. In their sense of progress and optimism for the future the people in our sample counties compare well with people in the nation generally. The desire for, and motivation to seek, a better quality of life seems nearly as strong in the mountains as elsewhere. Like people everywhere, the desire for further development is especially strong among the young and those groups—the growing middle classes—who have experienced the most improvement in their personal lives and for whom better conditions of life provide opportunities to seek further improvement. Although the elderly lack a sense of progress and optimism for improvement in the quality of life for themselves, their interest in the future well-being of their children and the widespread feeling that the current situation for young people is unsatisfactory gives older people in the mountains a potential role as supporters of certain types of development programs unmatched in the population nationally. In other words, the relatively strong family ties and interest in the welfare of one's children encourage older people in the mountains to be supportive of those programs which they perceive as beneficial to their children even when such programs may not be of benefit to them personally. This leads us to anticipate that development programs of special benefit to young people are likely to enjoy a wide base of public support.

Despite the general satisfaction with the mountains as a place to live, many residents expressed dissatisfaction with some aspects of social life. Though incomes and levels of living had improved, there was much dissatisfaction with what their incomes enabled them to buy. Job opportunities, the physical environment, and most aspects of government and politics also ranked low in public satisfaction. Not all of these, however, were regarded as important concerns when people were asked about their hopes and fears for the future. The central concerns in this respect were close to traditional interests of mountain people in their families and children, their health, and their economic well-being. Comparison of the responses to the two types of questions—quality of life in the county and quality of personal well-being—highlights a number of issues.

Clearly, the inability to acquire an expanding array of "necessities" of living was regarded by people in the mountains in 1973 as a serious present problem and one with which they were preoccupied in looking to the future. The lack of buying power affects evaluations of both the young and the old; it was also related to the lack of job opportunities, especially for young people who have been compelled to leave the mountains in

[25] Ball, "A Poverty Case: The Analgesic Subculture of the Southern Appalachian," p. 892; Caudill, *Night Comes to the Cumberlands*, p. 325; Weller, *Yesterday's People*, p. 155; Polansky, *Roots of Futility*.

search of jobs, thereby depriving parents of cherished relationships with their children. There is little doubt that improvement in job opportunities and real income are regarded by mountain people as central to improvement in the quality of life in the mountains.

While recognizing that there has been much improvement in medical care and services, many in the mountains obviously felt that there was room for considerable further improvement and their feelings in this respect are made especially salient by their hopes and fears regarding personal and family health in the future. Thus, future improvement in the quality of life for young and old alike is closely connected with further improvements in medical care and services.

Welfare programs have been much improved during the past decade, but mountain people hold ambivalent attitudes about "government programs." While most would like to see them continued, many felt that some governmental programs have been poorly administered or have been detrimental.[26] In consequence, mountain people generally do not credit improved welfare programs with having improved the overall conditions of life in the mountains. There are, however, two notable exceptions. Those "welfare" programs connected with the schools, such as the school lunch program and Headstart, and with improved medical services have been generally applauded and are regarded as having contributed to improvement in the quality of life.

To people in the mountains the quality of the environment encompasses both the home and its immediate surroundings as well as the broader arena of the physical environment in which they live. Housing and the home environment improved during the 1960s, especially in the rapid increase in plumbing and appliances. The development of public housing in Eastern Kentucky towns is a source of satisfaction and from this standpoint the quality of the environment has been improved. Further improvement in this respect is hoped for in the future. At the same time, many in these counties regard the quality of the environment as a whole as becoming worse, owing primarily to the desecration of the mountains from strip mining. In 1973 nearly half regarded the situation in overall terms as "only fair" or "poor," and the growth of strip mining since then may have increased that proportion. Despite its ravages, however, strip mining has meant jobs and better incomes. Thus, few of the people in these counties wanted to ban strip mining altogether. Most favored better regulation and control of the harmful effects of strip mining, including requiring those companies engaged in strip mining to repair the damage done to roads.[27] Since our survey the Federal Strip Mine Control Act of 1976 has been passed, though its enforcement is still not fully implemented. Our survey data lead us to expect that mountain people will generally support the enforcement of this act, even though many strip mine operators and their political allies claimed it would have a devastating effect on the Eastern Kentucky economy.

The quality of county government, politics and political parties, law enforcement, and obedience to laws were widely regarded as having become worse during the past decade and to be quite unsatisfactory at the time of the survey. Among those living in the country in these counties, and likely those in the towns as well, pessimism about these aspects of life was as widespread in 1973 as it had been in the early 1960s. This reflects a widespread fatalism about prospects of improvement in the quality of political institutions, and this interpretation is reinforced by the failure of household heads and homemakers to list improvement in local government or the administration of law as elements about which they hoped for improvement in the future, despite the fear that crime and drug problems might increase. The hopelessness with which mountain people view their political institutions depresses their present satisfaction with the quality of life in the county

[26] Anne V. Gabbard and C. Milton Coughenour, *Opinions of Eastern Kentuckians on Surface Mining and Governmental Programs.* Lexington, Ky.: University of Kentucky, Agricultural Experiment Station, RS-34, 1973.

[27] Gabbard and Coughenour, *op. cit.*

and doubtless also diminishes the optimism with which they regard the future. Though the need for improvement in the conditions and functioning of local political institutions probably ranks along with better job opportunities and incomes in its importance for a better quality of life in the future, mountain people were not optimistic that such improvement could occur and apparently did not feel that they had the means to bring it about. Improvement in the political aspects of life thus looms as the most intractable problem of all in the mountains and presents the greatest challenge to those concerned with the formulation of social policy for long range improvement in the quality of life in the mountains.

Although we are not optimistic that the basic character of political institutions in the mountains will quickly change, there are a few bases for hope that improvement is taking place. One is the recent influx of migrants who bring with them new perspectives, an impatience with "things as they have always been," and greater readiness to actively participate in developmental activities. These, plus a more affluent population in general—at least in the counties sharing in the coal boom—will demand more and be able to pay for better services even as increased public revenues enable local governments to provide such services. Moreover, the recent state constitutional amendment that has created a new court system has the potential of improving local law enforcement and providing opportunities for other needed changes. Thus there is evidence of accelerating social and political change that could be reflected before long in greater public satisfaction with local government. Our survey data provide one example, in that Whitley County, which in 1973 was experiencing the most industrialization and urbanization, had recently elected new officials who were shaking up county government—and the survey respondents in this county rated their local government higher than those of any other county.

While we have emphasized and documented in this report the importance of people's subjective assessment of their life situation and we reiterate here the relevance of such data to policy, we do not suggest or condone measures to enhance artificially satisfaction as a substitute for objectively measurable improvement against national norms. We do suggest that comparison of the present situation with that of the recent past in the same area or family may be equally valid as a basis for life satisfaction or dissatisfaction as comparison with the current situation of other areas or people, at least in the short-run. But, in the long-run, unless the gap between Appalachia and the nation as to education, health care, economic opportunity and governmental services is progressively closed we cannot expect the subjective quality of life to be maintained. People need to know how they stand in comparison to contemporary reference groups, and a public policy of promoting their access to such data may promote creative dissatisfaction. But an important caveat for both the public and the policy makers is that national norms should not uncritically be accepted as the absolute "good" against which we measure things in every region, state or family.

Other Publications from the U.K. Quality of Life Study

Department of Sociology, Agricultural Experiment Station, Rural Sociology Series:

R.S. 34 *Opinions of Eastern Kentuckians on Surface Mining and Governmental Programs.* Anne V. Gabbard and C. Milton Coughenour, October, 1973.

R.S. 35, 36 37, 38 *Rural Development and The Quality of Life in Harlan, Perry, Whitley, and Wolfe Counties: Summaries of Data from Surveys of Households in 1961 and 1973.* A. Lee Coleman, C. Milton Coughenour, Anne V. Gabbard, and David Zierath (December 1973). #35-Harlan, #36-Perry, #37-Whitley, #38-Wolfe.

R.S. 39 *Is the Quality of Life in the Kentucky Mountains Improving? The Opinions of Community "Knowledgeables" and Ordinary Residents in Four Eastern Kentucky Counties.* A. Lee Coleman and Anne V. Gabbard, (January 1974).

R.S. 45 *Quality of Life: How Community Leaders and Ordinary Residents Assess Various Aspects of Life in Four Kentucky Mountain Counties.* A. Lee Coleman, (August 1975).

R.S. 46 *Quality of Life of Country Families in Four Eastern Kentucky Counties: Change and Persistent Problems, 1961 and 1973.* C. Milton Coughenour, (September 1975).

Coughenour, C. Milton, 1976, "Measuring the Quality of Life for Rural Families," *Appalachia.* Washington, D.C.: Appalachian Regional Commission.

BIBLIOGRAPHY

Ball, Richard A., "A Poverty Case; the Analgesic Subculture of the Southern Appalachians," *American Sociological Review,* 33 (December 1968):885-895.

Bauer, Raymond A. (ed.) *Social Indicators.* Cambridge, Mass.: M.I.T. Press, 1966.

Bradburn, Norman, *The Structure of Psychological Well-Being.* Chicago: Aldine, 1969.

Bradburn, Norman M. and Caplovitz, David, *Reports on Happiness.* Chicago: Aldine, 1965.

Campbell, Angus and Converse, Phillip (eds.), *The Human Meaning of Social Change.* New York: Russell Sage, 1972.

Campbell, Angus; Converse, Phillip; and Rodgers, David L., *The Quality of American Life.* New York: Russell Sage, 1976.

Cantril, Hadley, *Public Opinion, 1935-1946.* Princeton, N.J.: Princeton University Press, 1951.

Cantril, Hadley, *The Pattern of Human Concerns.* New Brunswick, N.J.: Rutgers University Press, 1965.

Caudill, Harry, *Night Comes to the Cumberlands.* Boston, Mass.: Little, Brown, 1963.

Cohn, Wilbur, *Toward a Social Report.* Washington, D.C.: U.S. Government Printing Office, 1969.

Coughenour, C. Milton, "Measuring the Quality of Life for Rural Families," *Appalachia,* 9 (Feb.-March 1976), pp. 1-9.

Duncan, Otis Dudley, *Toward Social Reporting: Next Steps.* New York: Russell Sage, 1969.

Duncan, Otis Dudley; Schuman, Howard; and Duncan, Beverly, *Social Change in a Metropolitan Community.* New York: Russell Sage, 1973.

Executive Office of the President, Office of Management and Budget, *Social Indicators, 1973,* Washington, D.C.: U.S. Government Printing Office, 1973.

Gross, Bertram M. (ed.), *Social Intelligence for America's Future.* Boston, Mass.: Allyn and Bacon, 1969.

Gurin, G.; Veroff, J.; and Field, S., *Americans View Their Mental Health.* New York: Basic Books, 1960.

Hanson, Niles, *Location Preferences, Migration and Regional Growth: A Study of the South and Southwest United States.* New York: Praeger, 1973.

Herzberg, F. et al., *The Motivation to Work,* New York: John Wiley, 1959.

Jesser, "Community Satisfaction Patterns of Professionals in Rural Areas," *Rural Sociology,* 32 (March 1967): 56-59.

Johnson, Ronald L. and Knop, Edward, "Rural-Urban Differentials in Community Satisfaction," *Rural Sociology,* 35 (December 1970): 544-48.

Land, Kenneth and Spilerman, Seymour (eds.) *Social Indicator Models.* New York: Russell Sage, 1974.

Lerner, Daniel, "Toward a Communication Theory of Modernization," in Lucien W. Pye, *Communication and Political Development.* Princeton, N.J.: Princeton University Press, 1963.

Lerner, Daniel, "International Cooperation and Communication in National Development," in Daniel Lerner and Wilbur Schramm (eds.), *Communication and Change in Developing Countries.* Honolulu: East-West Center Press, 1967.

Lui, Ben-Chieh, *Quality of Life Indicators in U.S. Metropolitan Areas, 1970.* U.S. Environmental Protection Agency, 1975.

Lui, Ben-Chieh, "Variations in the Quality of Life in the U.S. by State, 1970," *Review of Social Economy,* XXXII (October, 1974), pp. 131-147.

Lui, Ben-Chieh, *The Quality of Life in the United States, 1970.* Kansas City, Mo.: Midwest Research Institute, 1973.

Pickard, Jerome, "Per Capita Income Gap Between Appalachia and U.S. Diminishes," *Appalachia,* 8 (June-July 1975), 29-44.

Polansky, Norman A., *Roots of Futility.* San Francisco: Jossey Bass, 1972.

Sheldon, Eleanor B. and Moore, Wilbert E. (eds.), *Indicators of Social Change.* New York: Russell Sage, 1968.

Sheldon, Eleanor B. and Parke, Robert, "Social Indicators," *Science,* 188 (May 1975), 693-699.

Srole, Leo, "Social Integration and Certain Corollaries: An Exploratory Study," *American Sociological Review,* 21 (December 1956), 709-716.

Turner, A. N. and Lawrence, P. R., *Industrial Jobs and The Worker: An Investigation of Responses to Task Attributes.* Cambridge, Mass.: Harvard University Press, 1965.

Vroom, Victor, *Motivation to Work.* New York: John Wiley, 1964.

Walk, David S. and Stephenson, John B. (eds.), *Appalachia in the Sixties: Decade of Reawakening.* Lexington, Ky.: University of Kentucky Press, 1972.

Watts, William and Free, Lloyd A., *State of the Nation.* New York: Universe Books, 1973.

Watts, William and Free, Lloyd A., *State of the Nation, 1974.* Washington, D.C.: Potomac Associates, 1974.

Weller, Jack E., *Yesterday's People. Life in Contemporary Appalachia.* Lexington, Ky.: University of Kentucky Press, 1966.

Wilson, John, *The Quality of Life in America.* Kansas City, Mo.: Midwest Research Institute, 1967.